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Variations and conditions of the composition natural waters in the central european russia (On example of the Tatarstan republic)

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Abstract

© SGEM2017 All Rights Reserved. The upper part of the Tatarstan Republic section is complexed by sedimentary of multi facies complexes of Middle Upper Permian, Mesozoic and Pliocene-Quaternary rocks. The surface and ground water are characterized by a wide variability in composition, mineralization, water hardness and other parameters. These variations are determined by a complex of natural and technogenic factors. The most important natural factor is interaction of the atmospheric precipitation and their derivates with soils and rocks of the section. For assessment of this interaction, were analyzed water extracts and filtrates on the basis of distilled, snow melt and spring waters from the main types of soils and rocks. Additional determined the gradients of concentration changes by main parameters and components of the groundwater composition during their downward filtration in different regions of Tatarstan. The studies allows for predict hydrogeochemical conditions of active water exchange zone of cross section. First of all, this is necessary for the best location of water wells and efficient use of ground water.

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Keywords

Concentration gradients, Fresh groundwater, Water extracts

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